

Acquisition

Allegations of Impropriety in the Selection Process at the Office of the Director, Defense Research and Engineering (D-2003-089)

Department of Defense Office of the Inspector General

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Acronyms

AFRL Air Force Research Laboratory

CHSSI Common High Performance Computing Software Support

Initiative

HPCAP High Performance Computing Advisory Panel

HPCMP High Performance Computing Modernization Program

S&T Science and Technology T&E Test and Evaluation



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202–4704

May 12, 2003

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
AUDITOR GENERAL OF THE NAVY

SUBJECT: Report on Allegations of Impropriety in the Selection Process at the Office of the Director, Defense Research and Engineering (Report No. D-2003-089)

We are providing this report for review and comment. This audit was performed in response to a request from the Deputy Under Secretary of Defense (Science and Technology) and to allegations made to the Defense Hotline. We considered management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all issues be resolved promptly. The Director, Defense Research and Engineering comments were partially responsive in that they recognized the need for written guidance. We request additional comments to the recommendation in the report that a formal written policy be issued. Therefore, we request that the Director, Defense Research and Engineering provide comments to the recommendation by July 11, 2003.

If possible, please provide management comments in electronic format (Adobe Acrobat file only) to Audam@dodig.osd.mil. Copies of the management comments must contain the actual signature of the authorizing official. We cannot accept the / Signed / symbol in place of the actual signature. If you arrange to send classified comments electronically, they must be sent over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Questions should be directed to Mr. Bruce Burton at (703) 604-9071 (DSN 664-9071) or Mr. Michael Simpson at (703) 604-8972 (DSN 664-8972). See Appendix C for the report distribution. The team members are listed inside the back cover.

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Deputy Assistant Inspector General for Auditing

Office of the Inspector General of the Department of Defense

Report No. D-2003-089 (Project No. D2002AB-0176) May 12, 2003

Allegations of Impropriety in the Selection Process at the Office of the Director, Defense Research and Engineering

Executive Summary

Who Should Read This Report and Why? Scientists and engineers who use high performance computing tools should read this report to obtain information about the selection process used by the High Performance Computing Modernization Office to award funding to application software development projects.

Background. The High Performance Computing Modernization Program provides supercomputer services, high-speed network communications, and computational science expertise that enables the Defense laboratories and test centers to conduct a wide range of focused research, development, and test activities. The High Performance Computing Modernization Program's annual budget is approximately \$250 million. This report is concerned with software development projects valued at up to \$1.5 million each over a 3-year period. The Deputy Under Secretary of Defense (Science and Technology) requested that the Office of the Inspector General of the Department of Defense evaluate allegations in a letter that discussed potential conflict of interest in evaluating and selecting software projects that will be funded by the High Performance Computing Modernization Office. A second, anonymous letter that contained similar allegations was sent to the Department of Defense Hotline. This report addresses the allegations in both letters.

Results. The audit did not substantiate the allegations that conflicts of interest led to inappropriate evaluations and selections by the High Performance Computing Modernization Office of software development projects to fund. However, confusion caused by the lack of a written policy on evaluation procedures contributed to inconsistent interpretations by the different Military Department members of the selection panel. Written policy is needed that provides clear selection criteria. In addition, issues to be addressed should include: that technical evaluators should be government employees, Service members should rank only their own proposals, and persons whose organizations have a vested interest in the selection should recuse themselves from providing even informal ratings. See the Finding section of the report for detailed information on the recommendation.

Management Comments and Audit Response The Director, Defense Research and Engineering concurred with the report findings that the allegations were not substantiated.

The Director also said that our recommendations to reduce or eliminate inconsistent interpretations of procedures and to reduce any appearance of conflict of interest were incorporated into subsequent calls for proposals during 2002 and would be included in all future calls for project proposals. On the second point of our recommendation, the Director issued memorandums advising the High Performance Computing Advisory Panel members to rank only those proposals received from their Service or agency. Comments were partially responsive in that they recognized the need for written guidance, however the requirements are placed only in the data call instructions. A separate formal policy identifying the specific procedures for all future data calls needs to be issued to avoid the problems identified during the audit. Therefore we request additional comments on the issuance of a separate formal policy. We request that the Director, Defense Research and Engineering comment on this report by July 11, 2003. See the Finding section of the report for a discussion of management comments and the Management Comments section of the report for the complete text of the comments.

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Background

The audit was performed in response to a request from the Deputy Under Secretary of Defense (Science and Technology) and to allegations made to the Defense Hotline. See Appendix B for a summary of allegations and audit results.

The High Performance Computing Modernization Program (HPCMP). The HPCMP mission is to deliver world-class, high performance computational capability to the DoD science and technology (S&T) and test and evaluation (T&E) communities, facilitating the rapid insertion of advanced technology into superior warfighting capabilities. HPCMP is under the cognizance of the Deputy Under Secretary of Defense (Science and Technology) within the Office of the Director, Defense Research and Engineering, and has an annual budget of approximately \$250 million.

HPCMP is made up of three components: High Performance Computing Shared Resource Centers, Networking, and Software Application Support. The allegations under review involve the Common High Performance Computing Software Support Initiative (CHSSI) segment of the Software Application Support component.

CHSSI is an application software development program that provides DoD computational scientists and engineers with technical codes to best use computing systems. Under CHSSI, the HPCMP management issues annual calls for proposals in specific areas of science. The Service laboratories and several DoD agencies have the opportunity to submit proposals to HPCMP. CHSSI proposals selected for HPCMP funding receive approximately \$500 thousand per year for 3 years. Six proposals were selected for funding for FY 2002.

A joint Navy/Air Force project, started in FY 2000, for the development of software code for simulation of airflow was cancelled in September 2001 because of technical and managerial problems. Differences in the Services cultures and language used to write the code led to the termination of the project. Both Services submitted proposals to develop similar code during the FY 2002 selection process. The Air Force proposal was selected for award of funding. The Navy proposal was not selected.

Allegations. The allegations of conflict of interest were based on the fact that the Software Application Support Project Manager of HPCMP was on assignment from the Air Force Research Laboratory (AFRL) at Edwards Air Force Base, California, and may have inappropriately favored the Air Force in the selection process. A second allegation involved a lack of impartiality in scoring a proposal.

Objectives

The audit objective was to determine whether the allegations of impropriety in the solicitation and award of a new project funded by the High Performance Computing Modernization Program were valid. Specifically, we reviewed the procedures used for evaluating and selecting software proposals for funding, and whether the selecting officials had conflicts of interest during the selection process.

Evaluation Process for Funding Software Development Projects

Individuals in the scientific community were confused about the procedures used by the HPCMP personnel to evaluate and award funding to software development projects for FY 2002. That confusion occurred because the Deputy Under Secretary of Defense (Science and Technology) did not issue written policy and procedures on the evaluation and selection of proposals to fund software development projects. As a result, Military Department members of the selection panel used different procedures for ranking and submitting proposals.

Existing Procedures for the Evaluation and Award Process

FY 2002 Evaluation Process. For FY 2002, the HPCMP personnel analyzed the CHSSI proposals for technical merit and for mission relevance. Mission relevance is the applicability and importance of the work to the Services and Defense agencies missions. Technical merit was 80 percent of the score and mission relevance was 20 percent of the score. A panel of experts outside of DoD evaluated the technical merit of the proposals. The panel was comprised of three experts, one each from the National Aeronautics and Space Administration; Pratt & Whitney, a division of United Technologies Corporation; and the Boeing Company.

A panel of DoD representatives called the High Performance Computing Advisory Panel (HPCAP) evaluated the proposals for mission relevance.* The HPCAP members were issued copies of all 27 proposals submitted for FY 2002. They reviewed all of the proposals for mission relevance and determined which proposals would be the most beneficial to DoD. The HPCAP members assigned points to the proposals that they thought were worth pursuing. Each member was to allocate up to a total of 100 points.

The HPCMP management advised us that they chose not to issue guidance to the Military Department panel members explaining how to allocate points to the

^{*} HPCAP consists of 12 members: a S&T representative from each Service; a T&E representative from each Service; and one representative each from the Missile Defense Agency; the Defense Advanced Research Projects Agency; the Defense Threat Reduction Agency; the Office of the Director of Operational Test & Evaluation; the Assistant Secretary of Defense for Command, Control, Communication and Intelligence; and the Deputy Under Secretary of Defense (Science and Technology).

proposals. The Army and the Air Force HPCAP members selected a few of their best proposals, and spread the 100 points over those proposals. That allowed them to assign a significant amount of points to each proposal. Also, the Army and the Air Force submitted two ratings each, one from the S&T representative and one from the T&E representative, doubling their point total to 200. However, the Navy members assigned at least 5 points to each of their 13 proposals. The highest score for a Navy proposal was 11. The Navy T&E representative did not submit a separate scorecard. Those factors put the Navy proposals at a disadvantage when the votes were tallied and the Navy selections were compared to the Army and Air Force selections.

All three Service HPCAP members that we interviewed voted for their own Service proposals or for ones that would benefit their Service. The Military Department members allocated the points differently to maximize the number of their Department's proposals being selected.

Current Written Policy. The procedures used by HPCMP for the CHSSI evaluation and award process are not well defined. The procedures are only documented in internal and annual call memorandums, and a few briefing charts. We believe that writing defined procedures and issuing them to the participating laboratories would alleviate confusion and ensure equality in the process. Written procedures are especially important since almost the entire staff of HPCMP is detailed from other organizations on a rotating basis. Written policy would also be important to establish the roles of unofficial advisors especially when those advisors have an interest in funding awards. The lack of written policy contributed to concerns expressed in the Hotline allegation and further outlined in the Deputy Under Secretary Defense (Science and Technology) request. Each of the two Hotline issues and the results of our review are explained in Appendix B.

Ongoing Changes to the Evaluation and Award Process

Recalculation of the FY 2002 Evaluations. In December 2001 the Navy S&T HPCAP principal raised the issue of a misunderstanding of the methodology used during the FY 2002 selection process. Because of the misunderstanding, HPCMP reevaluated the rankings. HPCMP officials described the reevaluation as taking the rankings previously provided by the HPCAP representatives and considering only the points allocated to that representative's Service proposals. That reevaluation led to the selection of an additional Naval project, but not the one that was the subject of the Hotline allegations.

Future Mission Relevance Rankings. The process used by HPMCP for selection of the FY 2002 CHSSI proposals was not clearly established. That led

to different interpretations by the Service representatives as to how to rank the proposals for mission relevance.

HPCMP officials advised us that the process was revised for the FY 2003 selections in order to avoid the issues raised with the FY 2002 methodology. For FY 2003, the HPCAP members rated the mission relevance of only their own Service proposals before they were submitted for the technical reviews. The HPCAP members had to attach at least one point to each proposal that was submitted in order for that proposal to receive a technical review by the outside team of evaluators. In addition, according to an Army HPCAP member, the HPCAP representatives did not know how many proposals were being submitted by the other Services. By eliminating this knowledge, it reduced opportunities for the Military Departments to inappropriately score proposals. In addition, each Service was limited to one ranking as opposed to separate ones from the S&T and T&E representatives.

As part of an effort to downsize the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, the funding for HPCMP will be transferred to the Air Force. When the transfer between organizations occurs, it will be important to have well written evaluation and selection procedures already in place to aid the Air Force in their new oversight role.

Recommendation, Management Comments, and Audit Response

- 1. We recommend that the Director, Defense Research and Engineering issue written evaluation and award policy to define and establish the process used to select and award funding to Common High Performance Computing Software Support Initiative proposals. Issues that need to be addressed in the policy are:
- a. Technical evaluators should be from within the government in order to avoid potential competitive advantages for one contractor over another.
- b. HPCAP members should rank only their own Service or agency proposals, as was done in the FY 2003 selection process.
- c. Technical experts should not participate, nor provide technical advice, in the review and selection of proposals that they or their offices have submitted or will participate in performing if selected.

Management Comments. The Director of Defense Research and Engineering concurred with the report findings that the allegations were not substantiated. The Director of Defense Research and Engineering also said that our recommendations to reduce or eliminate inconsistent interpretations of procedures and to reduce any appearance of conflict of interest were incorporated into the FY 2003 Call for CHSSI Project Proposals, dated May 23, 2002, and a subsequent call for proposals, dated December 13, 2002. The Director said that the refined policies and the process would be included in all future calls for project proposals. The Director stated that the evaluation plans for each call for CHSSI project proposals, beginning with the call of May 23, 2002, incorporate the first and third points of our recommendation. On the second point of our recommendation, the Director issued memorandums advising HPCAP members to rank only those proposals received from their Service or agency.

Audit Response. The Director's comments were partially responsive in that they recognized the need for written guidance, however the requirements are placed only in the data call instructions. A separate formal policy identifying the specific procedures for all future data calls needs to be issued to avoid the problems identified during the audit. Therefore, we ask that the Director provide additional comments on the issuance of a separate formal policy.

Appendix A. Scope and Methodology

We performed audit work to examine allegations made in two letters of January 2002. A signed letter was sent to the Director, Defense Research and Engineering, and a second letter, which contained similar allegations, was sent to Defense Hotline. Allegations were made that individuals involved in the evaluation and selection process for FY 2002 were biased because of conflicts of interest. The core of the allegations is the procedure used by the High Performance Computing Modernization Office to solicit, evaluate, and select software development projects for funding. We reviewed the existing policy used for the evaluation and selection process. We also reviewed documentation specific to the FY 2002 process. In particular, we reviewed documentation of the Services' rankings for mission relevance. We discussed the allegations with the persons who wrote the letters. We also interviewed personnel from the High Performance Computing Modernization Office, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), Army Aviation and Missile Command, Office of Naval Research, Naval Research Laboratory, Air Force Research Laboratories in Virginia and California, and the Arnold Engineering Development Center.

We performed this audit from June 2002 through January 2003 in accordance with generally accepted government auditing standards. We did not review the management control program because the audit scope was limited to the allegations of conflicts of interest.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the DOD Systems Modernization high-risk area.

Prior Coverage

No prior coverage has been conducted on the HPCMP during the last 5 years.

Appendix B. Summary of Allegations and Audit Results

The audit was conducted in response to allegations made to the Defense Hotline. The following is a summary of the allegations and the specific results of each allegation. We did not substantiate either allegation, but did find other problems that led to the finding in our report.

Allegation No. 1: The Software Application Support Project Manager of HPCMP had a conflict of interest because of ties with the Air Force Research Laboratory (AFRL) at Edwards Air Force Base, California. Because of that conflict of interest, funding was awarded to an AFRL project that would not have been selected on its own merit.

Audit Results: The allegation was not substantiated. Air Force officials confirmed that the project manager was on assignment from AFRL at Edwards Air Force Base to be the project manager of the HPCMP CHSSI Program, among other programs. However there is no evidence to establish that the project manager used that position to unfairly award funding to an unworthy AFRL-Edwards project.

During the FY 2002 CHSSI award process, the project manager received the proposals and reviewed them for format, content, and page limits. HPCMP then sent the proposals to the technical evaluators and the HPCAP members for technical reviews and mission relevance reviews, respectively. The project manager did not perform any of those technical or mission relevance reviews. The project manager's role was to manage the process, not perform the evaluations.

In October 2001, the reviewers' scores were compiled using the 80 percent to 20 percent ratio discussed on page 3 of the Finding section of this report. The project manager compiled a list of the top 10 proposals with funding recommended for those with the highest scores. The HPCMP Program Director approved the list and the funding.

Allegation No. 2: One member of the evaluation panel was allowed to review and score his own proposal. That member's influence was rewarded with funding for his proposal.

Audit Results: The allegation was not substantiated. The Technical Director of the Applied Technology Division of the Arnold Engineering

Development Center was the leading expert for FY 2002 proposals on Computation Technology. The technical director described his role as a technical advisor for the project manager and HPCMP. The technical director was also part of a team from Arnold Engineering Development Center that submitted a proposal to HPCMP for the FY 2002 award process.

The HPCAP members were asked to provide mission relevance ratings for the 27 proposals. The allegation arose because the Air Force HPCAP S&T advisor asked for the opinions of Air Force experts, including the technical director, as to the mission relevance of the 27 proposals. The project manager advised us that there is no HPCMP policy that prohibits the Air Force HPCAP S&T advisor from seeking the opinions of experts in the field.

Air Force officials stated that the technical director reviewed the proposals and submitted his unofficial scores to the HPCAP S&T advisor for further consideration. The technical director included his proposal in the scoring. The HPCAP S&T advisor considered the technical director's scores as well as the scores of several other experts, which were compiled in preparation of the official position for the Air Force S&T and T&E communities. The technical director was not an HPCAP member and did not submit an official score on either technical merit or mission relevance. Although the scoring did not officially impact the selection process, the unofficial scoring did give the appearance of favoritism and impropriety in the selection process. As a result, the issue was addressed in the recommendation.

Appendix C. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics Director, Defense Research and Engineering
Deputy Under Secretary of Defense (Science and Technology)
Director, High Performance Computing Modernization Program
Under Secretary of Defense (Comptroller)/Chief Financial Officer
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Naval Inspector General Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller) Auditor General, Department of the Air Force

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Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on Defense, Committee on Appropriations

House Committee on Armed Services

House Committee on Government Reform

House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform

House Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform

House Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census, Committee on Government Reform

Defense Research and Engineering Comments

Final Report Reference



DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING 3030 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3030

APR 2 2003

MEMORANDUM FOR INSPECTOR GENERAL (IG) OF THE DEPARTMENT OF DEFENSE (DoD)

THROUGH: DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS 100

SUBJECT: Response to Draft Report (Project No. D2002AB-0176)

Reference: DoD IG draft report: Allegations of Impropriety in the Selection Process at the Office of the Director, Defense Research and Engineering (Project No. D2002AB-0176), January 30, 2003

D2002AD-0170), January 30, 2003

On June 25, 2002, the Inspector General of the Department of Defense advised the Under Secretary of Defense for Acquisition, Technology, and Logistics of an audit to investigate allegations of impropriety in the selection processes of the Common High Performance Computing Software Support Initiative (CHSSI) at the DoD High Performance Computing Modernization Program (HPCMP). The draft report, referenced above, noted that the audit did not find evidence to substantiate the allegations. This office concurs with the findings of the report.

The report also furnished recommendations to reduce or eliminate inconsistent interpretations of procedures among participants in the evaluation process and to reduce any appearance of conflict of interest. The recommendations were incorporated into the FY 2003 Call for CHSSI Project Proposals, dated May 23, 2002, and also the Call for Additional FY 2003 CHSSI Project Proposals in Chemical/Biological Defense, dated December 13, 2002 (Attached). These refined policies and process will be included in all future calls for project proposals.

The evaluation plans for each call for CHSSI project proposals, beginning with the call of May 23, 2002, incorporate items concerning two points from the recommendation: technical evaluators must be from within the federal government and technical experts must be recused from evaluating proposals if they or their offices have submitted a proposal or plan to participate in the work if funded. The third point of the recommendation was addressed by issuing memoranda advising the High Performance Computing Advisory Panel to rank only those proposals received from their Service/Agency.

MAIM SARONAL RONALD A. Sega

Attachments



Attachments omitted because of length. Copies will be provided upon request.

Team Members

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

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